

## ABSTRACT OF THE DISCLOSURE

A mobile telecommunication apparatus includes an antenna, a receiving front end having an input end coupled to the antenna, a baseband-signal processing circuit coupled to an output end of the receiving front end, and a power amplifier module coupled at an output end to the antenna and coupled at an input end to the baseband-signal processing circuit. The power amplifier module includes a bias circuit to produce an idling current, and a power amplifier which has its gain controlled by the idling current. With this arrangement, effects of changes of control voltage and ambient temperature of the power amplifier module can be removed by a first detector in the bias circuit to detect changes of the control voltage and a second detector in said bias circuit to detect changes of the ambient temperature.